

a plurality of input/output devices capable of being used in conjunction with said first plurality of electronic components during said instant on mode of operation and with said second plurality of electronic components during said non-instant on mode operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

2. (Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;

a second plurality of electronic components defining a non-instant on mode of operation;

a plurality of input/output devices wherein said first plurality of electronic components

includes a first processor to execute instructions representing a first operating system and said second plurality of electronic components includes a second processor to execute instructions representing a second operating system; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

3. (Twice Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation wherein said first plurality of electronic components includes a first processor to execute instructions representing a first operating system;

a second plurality of electronic components defining a non-instant on mode of operation and including a second processor to execute instructions representing a second operating system, wherein said first plurality of electronic components includes a first memory device and said

second plurality of electronic components includes a second memory device, and wherein after start up said first and second processors operate simultaneously to synchronize data between said first and second memory devices;

a plurality of input/output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

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Beomul. 4. (Twice Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;

a second plurality of electronic components defining a non-instant on mode of operation, wherein at least one of said first and second plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode said processor executes instructions representing a first operating system, and when in a second operating mode said processor executes instructions representing a second operating system;

a plurality of input/output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

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B4 C4 (Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;

a second plurality of electronic components defining a non-instant on mode of operation;

a plurality of input/output devices; and

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one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components wherein said one or more switching mechanisms includes a digital multiplexer.

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8. (Twice Amended) An apparatus comprising:
an integrated circuit having a plurality of function blocks for use in first instant on mode of operation;

a plurality of electronic components for use in a second non-instant on mode of operation;

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a plurality of input and output devices capable of being used in conjunction with said plurality of function blocks during said first instant on mode of operation and with said plurality of electronic components during said second non-instant on mode operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

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9. (Amended) An apparatus comprising:
an integrated circuit having a first plurality of function blocks for use in a first instant on mode of operation wherein said first plurality of function blocks includes a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation, and wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said first plurality of function blocks.

10. (Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system;

a plurality of input and output devices;

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks; and

a connector interface to couple said one or more switching mechanisms to said integrated circuit.

11. (Twice Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first memory device and a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second memory device and a second processor to execute instructions representing a second operating system and wherein said first and second processors operate simultaneously to synchronize data stored within said first and second memory devices;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

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concl. 12 (Twice Amended). An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in first instant on mode of operation;

a plurality of electronic components for use in a second non-instant on mode of operation wherein at least one of said plurality of function blocks and said plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode, said processor executes instructions representing a first operating system, and when in a second operating mode, said processor executes instructions representing a second operating system;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

14. (Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation;

a plurality of electronic components for use in a second non-instant on mode of operation;

a plurality of input and output devices wherein said plurality of input and output devices includes a user input device and a display device; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

17. (Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation;

a second processor block to operate in a second non-instant on mode of operation;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said plurality of external devices includes a user input device and a display device.

18. (Twice Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation;

a second processor block to operate in a second non-instant on mode of operation;

a plurality of input/output ports; and

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one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more external devices includes a first memory device and a second memory device, and wherein after start up said first and second processor blocks operate simultaneously to synchronize data between said first and second memory devices.

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An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation;
a second processor block to operate in a second non-instant on mode of operation;
a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more switching mechanisms includes a digital multiplexor.

REMARKS

Claims 1-20 are pending in the application. In the above Office Action the Examiner indicated that claims 3-4, 6, 10, 11-12, 14, 17-18 and 20 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, by this Amendment Applicant has amended claims 3-4, 6, 10-12, 14, 17-18 and 20 in the manner suggested by the Examiner. Claims 2 and 9 have also been so rewritten in independent form as these claims were not rejected in the above Office Action and are believed to be patentable over the cited prior art. In addition, claims 1 and 8 have been amended in order to further define the